

**Dynegy's Pre-Workshop Comments on MISO Zone 4 Resource Adequacy Issues and the Illinois Commerce Commission White Paper on Resource Adequacy in MISO Zone 4**

Dynegy submits these pre-workshop comments on MISO Zone 4 Resource Adequacy issues and the Illinois Commerce Commission ("ICC" or "Commission") White Paper dated November 1, 2017 on "Resource Adequacy in MISO Zone 4." Dynegy's comments consist of two parts: (1) Specific comments on the ICC White Paper, and (2) a summary of Senate Bill 2250 (sponsored by Senators Clayborne and Rezin) and its identical counterpart House Bill 4141 (sponsored by Representatives Chapa LaVia, Bourne and Sims). Senate Bill 2250 and House Bill 4141 were developed by Dynegy in conjunction with Ameren Illinois to establish a process to address resource adequacy issues in MISO Zone 4. **Attachment A** to these Comments is a copy of Dynegy's testimony submitted to the joint subject matter hearing of the Senate Energy and Public Utilities Committee and House Energy Committee held on November 7, 2017, on MISO Zone 4 resource adequacy issues.

**I. DYNEGY COMMENTS ON THE ICC WHITE PAPER**

**A. Projections of Resource Adequacy in MISO Zone 4**

The ICC White Paper discusses projections of resource adequacy – *i.e.*, projected demand versus projected available capacity – in MISO Zone 4 for Delivery Years ("DY") 2018-2019 through 2022-2023. (A "Delivery Year" is the twelve month period from June 1 to the following May 31.) These projections are published in a voluntary annual survey of load-serving entities ("LSEs") and independent power producers in MISO that is conducted by MISO and the Organization of MISO States ("OMS"). The most recently-published survey (the "OMS Survey") was issued in June 2017 and covers the period from DY 2018-2019 through DY 2022-2023. The ICC White Paper notes several criticisms of the OMS Survey and results; however, for purposes of these Comments, Dynegy accepts the load and capacity projections in the OMS Survey, as is, to use as a starting point for further analysis of resource adequacy in MISO Zone 4 during this time period. This analysis will demonstrate that shutting down or otherwise removing even a portion of the at-risk Dynegy generation in Downstate Illinois in the near future will result in serious resource adequacy deficiencies in MISO Zone 4.

While any forecast is a product, in part, of the assumptions used in preparing it, and changes in assumptions may lead to changes in the forecast values, Dynegy notes the following points about the OMS Survey:

- The OMS Survey is based on load forecasts provided by LSEs in MISO, who, presumably, have incentives to be as thorough and accurate as possible (*i.e.*, their load forecasts are being used for their own planning, budgeting, and financial reporting purposes). The load forecasts are further reviewed by MISO. The load forecasts, therefore, in the aggregate, reflect the plans and expectations of the LSEs in MISO, such as load reductions due to energy efficiency programs. For example, in the OMS Survey, the projected peak demand in MISO Zone 4 for DY 2018-2019 is reduced by approximately 400 MW from the load forecast in the previous year's OMS Survey.
- The OMS Survey counts only in-service capacity considered to have a "High Certainty" of being available in the relevant DY based on survey responses from LSEs

and generator owners. The amounts of “High Certainty” capacity in Zone 4 for DY 2018-2019 through DY 2022-2023 (including projected firm imports and exports into and out of Zone 4) are in the range of 11,800 MW to 12,300 MW.<sup>1</sup>

- The resources side of the OMS Survey takes into account planned generation additions based on their stages of development. Specifically, the OMS Survey includes new generators with signed interconnection agreements and 35% of new resources that are in the Definitive Planning Phase (“DPP”) of the MISO interconnection queue, but does not include potential new generators without a signed interconnection agreement or which have not entered the DPP of the MISO queue. The OMS Survey’s treatment of planned new generators reflects the historical reality that a significant percentage of proposed new generation resources that enter the MISO interconnection queue (or the queue of any other RTO or ISO) are never completed and placed into service.<sup>2</sup>

Pages 2-3 of the ICC White Paper list the 28 generator projects, totaling 4,400 MW of nameplate capacity, in the MISO generator interconnection queue as of October 2017 for interconnection with the transmission systems of Ameren Illinois (26 projects), City of Springfield City Water, Light and Power (“CWLP” – 1 project) or Southern Illinois Power Cooperative (“SIPC” – 1 project).<sup>3</sup> The projects are shown as having various in-service dates in the years 2017, 2019, and 2020. Of these projects, 13 are wind projects with aggregate capacity of 2,147 MW; 14 are solar projects with aggregate capacity of 2,160 MW; and there is one, 57 MW gas-fueled generator. According to the more detailed listing on the MISO website, all of the listed projects seeking interconnection to Ameren Illinois are in the DPP (including those listed with 2017 in-service dates), meaning that the developer and Ameren Illinois are awaiting the System Impact Study results to see what the total cost to the developer will be for the network upgrades determined to be needed for the interconnection. Additionally, all of the listed wind and solar projects have target in-service dates no later than 2020, which may be tied to the scheduled phase-out of federal tax incentives. These points help to illustrate why the MISO Survey assumes that only 35% of proposed new generation projects that have reached the DPP in the MISO interconnection process will be completed and placed into service.

Additionally, the “Output (MW)” value listed for each plant in the table on pages 2-3 of the ICC White Paper is the nameplate capacity value. However, given the intermittent and variable nature of wind and solar generators, MISO, consistent with Good Utility Practice, adjusts the nameplate capacity values of wind and solar generators, based on the actual historic forced outage

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<sup>1</sup> The ICC White Paper (p. 6) states that Zone 4 currently has 57 utility-scale generating units with summer capacity of over 14,000 MW. The difference between this figure and the 11,800 MW to 12,300 MW figure used in the OMS Survey may be due, in whole or in part, to: (i) generating units in Zone 4 owned by Ameren Missouri, totaling 1,741 MW of capacity, which are pseudo-tied to the Ameren Missouri Balancing Area (MISO Zone 5), although Dynegy understands that the OMS Survey includes this Ameren generation dedicated to serving Zone 5 as available capacity for Zone 4; (ii) Dynegy’s Baldwin Unit 3 (578 MW), which has been mothballed and is not counted by MISO as High Certainty Capacity; and (iii) Dynegy’s 1,100 MW Joppa Station, which is not physically located within MISO nor within the Ameren Illinois Balancing Area and whose capacity and energy can be sold in other markets with which it has transmission connections. (The ICC White Paper does note that the Joppa Station is located outside of Zone 4 (p. 8)).

<sup>2</sup> The development of the 35% figure is described on pages 15-16 of the OMS Survey.

<sup>3</sup> Ameren Illinois, CWLP and SIPC are the three balancing authorities in MISO Zone 4. In other words, the potential projects listed in pages 2-3 of the ICC White Paper comprise the currently proposed projects that would deliver energy into the MISO Zone 4 grid.

rate of each unit, to arrive at a load-carrying capability value (commonly referred to as a capacity factor) that represents the generator’s expected available capacity to meet peak demand. Due to a lack of actual operating history for resources in the interconnection queue, MISO uses a class-average capacity factor of 15.6% for wind generators and 50% for solar generators. Therefore, the 13 wind projects in the interconnection queue, if all were brought into service (which, based on experience, is unlikely), would comprise approximately 335 MW of capacity to meet peak demand, and the 14 solar projects, if all were brought into service, would comprise approximately 1,080 MW of capacity to meet peak demand.

There is one adjustment that should be made, based on the results of MISO’s Loss of Load Expectations Study for the 2018-2019 Planning Year, to the load and capacity projections for DY 2018-2019 through DY 2022-2023 in the OMS Survey. The OMS Survey was prepared using a Planning Reserve Margin (“PRM”) of 15.8%.<sup>4</sup> However, effective November 1, 2017, MISO has increased the PRM to 17.1%.<sup>5</sup> MISO’s planning process is conducted on an “unforced capacity” (“UCAP”) basis, in which the PRM increase from 15.8% to 17.1% translates to an increase on a UCAP basis from 7.8% to 8.4%. Thus, for example, assuming a forecasted demand of 9,000 MW in MISO Zone 4, the increase in the PRM indicates that an additional approximately 54 MW of capacity is needed to meet the total planning requirement.<sup>6</sup> Stated differently, a projected capacity surplus of 400 MW above the previous PRM would be reduced to a capacity surplus of 346 MW above MISO’s revised PRM.

With the above noted, the projected capacity surpluses above PRM per the OMS Survey, adjusted for the revised PRM, for MISO Zone 4 for DY 2018-2019 through DY 2022-2023, are:

<u>DY</u>	<u>Capacity Surplus</u>	<u>Adjusted Capacity Surplus</u>
2018-2019	700 MW	646 MW
2019-2020	900 MW	846 MW
2020-2021	1,300 MW	1,246 MW
2021-2022	1,000 MW	946 MW
2022-2023	400 MW	346 MW

However, the projected capacity surplus figures in the OMS Survey include all of Dynegy’s at-risk Downstate generating units, other than Baldwin Unit 3, as available capacity.<sup>7</sup> While

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<sup>4</sup> The PRM, or Planning Reserve Margin, is the percentage of projected peak demand specified to be required as reserves. The Planning Reserve Margin Requirement, or “PRMR,” is the total MW of capacity specified as needed to meet the projected peak load plus the PRM.

<sup>5</sup> It is Dynegy’s understanding that the principal reason for the increase in the PRM is recent increases in outage rates experienced for gas-fueled generators in MISO.

<sup>6</sup>  $9,000 \text{ MW} \times (0.084 \text{ minus } 0.078) = 54 \text{ MW}$ .

<sup>7</sup> Baldwin Unit 3 is not included because it has been mothballed and in response to the MISO/OMS survey, Dynegy designated it as having Low Certainty of being available. In addition to mothballing Baldwin Unit 3 (578 MW), Dynegy has also in recent years retired the following units in Downstate Illinois: Havana Units 1-5 (235 MW total); Vermilion Units 1 and 2 (197 MW total); Edwards Unit 1 (136 MW); Wood

Dynegy has not reported to MISO that other currently operating units will be retired or otherwise shut down, a number of those units are at risk of being shut down in the near future – as early as DY 2018-2019 – due to the low capacity prices and therefore low capacity revenues that these units are able to obtain in MISO Zone 4. These units are operating at a cash-flow negative basis, meaning that their fuel and other operating expenses exceed their revenues (and, therefore, that operation of these units produces no profit or return on capital). In addition, Dynegy’s 1,100 MW Joppa Station in Massac County is not physically located within MISO, although the OMS Survey has counted it as available capacity for Zone 4. Although the Joppa Station has been used in the past to serve load in MISO Zone 4, the plant has transmission interconnections to other markets and its capacity (and energy) can be sold into these other markets on far superior commercial terms as compared to the clearing prices in the MISO residual auctions.

Thus, the possible shut down or removal (*e.g.*, sale to other markets) of additional Dynegy generating units poses a serious near-term risk of a capacity deficit in MISO Zone 4, as illustrated by the following table:<sup>8</sup>

Action/Result	DY 2018-19	DY 2019-20	DY 2020-21	DY 2021-22	DY 2022-23
Adjusted Capacity Surplus	646 MW	846 MW	1,246 MW	946 MW	346 MW
<i>Move Joppa to another market</i>	(1,100) MW	(1,100) MW	(1,100) MW	(1,100) MW	(1,100) MW
Revised Capacity Surplus (Deficit)	(454 MW)	(254) MW	146 MW	(154) MW	(754 MW)
<i>Retire/Shut down Additional DYN Capacity</i> <sup>9</sup>	(414) MW	(414) MW	(414) MW	(414) MW	(414) MW
Revised Capacity Surplus (Deficit)	(868) MW	(658) MW	(268) MW	(568) MW	(1,168) MW
<i>Retire/Shut down Additional DYN Capacity</i> <sup>10</sup>	-----	(414) MW	(414) MW	(414) MW	(414) MW
Revised Capacity Surplus (Deficit)	(868) MW	(1,072) MW	(682) MW	(982) MW	(1,582) MW

The amount of Dynegy generating capacity shown in the above table as potentially being shut down or sold into another market is not all of the Dynegy generating capacity in Downstate Illinois that is at risk of near-term retirement due to low capacity market prices in Zone 4. Dynegy has some 3,000 MW of generating capacity in Downstate Illinois at risk of shutdown or removal from the Zone 4 market.

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River Units 1-3 (138 MW total) and 4-5 (465 MW total); and Newton Unit 2 (617 MW) – a total of about 2,366 MW of capacity retired or mothballed.

<sup>8</sup> The specific generating units used in the table (*see* notes 9 and 10 below) are used as examples only, and do not represent a specific plan to shut down the specific units rather than other Dynegy units.

<sup>9</sup> The 414 MW amount represents the median capacity of at-risk Dynegy generating units. The capacity values used for the Dynegy units are as reported for the OMS Survey and are based on recent capacity testing.

<sup>10</sup> The 414 MW amount represents the median value of the at-risk Dynegy generating units after the shut down or removal of generation referred to in note 9.

Further, with a projected peak demand of approximately 9,000 MW in MISO Zone 4, the PRM of 8.4% (UCAP basis) is equal to approximately 756 MW (9,000 MW X 0.084).<sup>11</sup> Therefore, the retirement or removal to another market of Dynegy generating units totaling about 750 MW (about 25% of Dynegy's at-risk capacity) would mean that available capacity is approximately equal to projected load, with no reserve. As illustrated in the above table, the retirement or removal from the Zone 4 market of only the units depicted in the table results in available Zone 4 capacity being less than the projected demand, indicated in the OMS Survey, in DY 2018-2019, 2019-2020, DY 2021-2022 and DY 2022-2023.

It might be asserted that if Dynegy notified MISO that it was retiring generation as depicted in the above table, MISO could invoke its System Support Resources ("SSR") Tariff to require Dynegy to keep one or more of the retiring units in operation, while compensating Dynegy through cost of service-based payments under an SSR agreement. However, the MISO SSR Tariff as written only provides for generating units to be designated as SSR's in order to maintain transmission system reliability (including compliance with thermal and voltage limitations under applicable NERC Standards) and not to maintain resource adequacy (*i.e.*, sufficient capacity to serve projected demand plus reserve requirements). Further, the compensation that would be provided to Dynegy for maintaining the SSR units in operation could be very expensive to electricity consumers. For example, in 2013, 2014 and 2015, Dynegy operated its Edwards Unit 1 (now retired) under an SSR agreement with MISO. The compensation received by Dynegy equated to approximately \$213 per MW-Day in 2013, \$338 per MW-Day in 2014, and \$198 per MW-Day in 2015.<sup>12</sup> For comparison: (i) the highest recent clearing price in the MISO capacity auction for Zone 4 was \$150 per MW-Day for DY 2015-2016; (ii) the most recent clearing price for the PJM-Northern Illinois capacity auction was \$153 per MW-Day; and (iii) current Cost of New Entry ("CONE") in MISO Zone 4, under the MISO Tariff, is \$260 per MW-Day.<sup>13</sup>

In summary, an assertion that the most recent OMS Survey shows that there are adequate capacity resources to serve load in MISO Zone 4 through DY 2022-2023 begs the specific question that is on the table: What is the impact on resource adequacy in Zone 4 if additional at-risk Dynegy capacity in Downstate Illinois is retired, mothballed, or sold into another market, due to the capacity market conditions in Zone 4. The foregoing analysis demonstrates that shut down or removal of even a portion of the at-risk Dynegy capacity in the near future will result in serious resource adequacy deficiencies in MISO Zone 4.

## **B. Transmission Import and Export Capacity**

The ICC White Paper provides information on transmission capacity import and export limits ("CIL" and "CEL") into and out of MISO Zone 4 (pp. 12-13). Recent values of CIL and CEL are provided in the table on page 5. These values are the limits for intra-MISO imports and exports, *i.e.*, the limits for capacity imports from other MISO local resource zones ("load zones")

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<sup>11</sup> The 9,000 MW peak load figure is comprised of approximately 8,800 MW of customer demand plus approximately 200 MW of transmission losses.

<sup>12</sup> The compensation for 2014 included costs for a turbine overhaul needed at Edwards Unit 1. While this was a non-recurring cost, nevertheless, it is representative of the type of cost that can be necessary to continue an older unit in operation.

<sup>13</sup> The cost of the SSR compensation would be billed by MISO to LSEs in the area of the transmission grid that required reliability support from the SSR unit(s), and therefore, presumably, would ultimately be paid for by end-user electricity consumers of those LSEs. In the case of the Dynegy Downstate units, this would likely be the LSEs, and thus the retail customers, in the Ameren Illinois Balancing Area.

into Zone 4 and the limits for capacity exports from Zone 4 to other MISO load zones. The determination of zonal CIL and CEL by MISO requires considerable technical analysis and study on a recurring basis, as briefly described on page 12 of the ICC White Paper. The CIL and CEL can fluctuate considerably from year to year based on a number of factors including the availability of new transmission facilities and the impact of various contingencies within the particular zone. The CIL for Zone 4 has increased from 3,025 MW for DY 2014-2015 to 6,323 MW for DY 2016-2017, but decreased to 5,815 MW for DY 2017-2018. Over the same period, the CEL has increased from 1,961 MW for DY 2014-2015 to 11,756 MW for DY 2017-2018. For DY 2018-2019, the CIL is tentatively set at 6,278 MW and the CEL is tentatively set at 4,280 MW. Increasing transmission capacity between MISO Zone 4 and other MISO load zones provides the opportunity for generation in other MISO load zones to participate in the MISO PRA for Zone 4, as well as providing additional opportunities for generation within Zone 4 to sell capacity and energy to other markets in MISO.

The ICC White Paper also briefly describes the determination of the Local Clearing Requirement (“LCR”) by MISO, which is the minimum number of MW that must come from generators located within the load zone in satisfying the PRMR (p. 12). The LCR is directed to maintaining the reliability and functionality of the transmission grid within the load zone, rather than satisfying resource adequacy needs *per se* (although, obviously, a reliable and functioning transmission system is necessary in order to enable generation resources to meet demand). As shown by the table on page 12 of the ICC White Paper, for DY 2017-2018, the LCR for Zone 4 was 5,839 MW, representing 59% of the PRMR. This can be compared to DY 2014-2015, when the LCR was 8,879 MW, representing about 84% of the PRMR. For DY 2018-2019, the Zone 4 LCR is tentatively set at 7,265 MW. These data show that in recent years and currently, the level of the LCR as compared to the PRMR for Zone 4 is providing opportunity for generation resources in other MISO load zones to compete to serve load in Zone 4. However, the ability of resources in other MISO load zones to serve in-zone capacity requirements is limited by the zonal CILs and CELs established by MISO for each load zone in each year.

The data on the PRMR, LCR, CIL and CEL for MISO Zone 4 beg one of the fundamental questions regarding Zone 4 resource adequacy and capacity prices: Will capacity suppliers in other MISO load zones continue to be willing, and allowed, to supply capacity to meet the Zone 4 resource needs as customer loads increase and existing capacity decreases (due to retirements) in the other MISO load zones. Each of the nine other MISO load zones is comprised entirely or substantially of traditional vertically-integrated utilities that own the generation needed to serve their service area loads and are subject to cost of service-based rate regulation by state regulatory authorities, and in some cases to integrated resource planning requirements.<sup>14</sup> Dynegy views it as unlikely that regulated utilities in other MISO states will continue to provide generating capacity, including by building new generation, to serve load in MISO Zone 4 as and if the load and capacity outlooks in their service areas tighten.

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<sup>14</sup> Thirteen of the 15 states within the MISO footprint are served predominantly by traditional, vertically-integrated, cost-of-service rate regulated electric utilities. In addition to Illinois, only Michigan has a partially competitive electricity market. Further, the Michigan legislature has recently enacted statutory amendments, which the Michigan Public Service Commission is in the process of implementing, to require LSEs in Michigan to demonstrate that they have secured sufficient capacity resources to serve loads four planning years into the future. Michigan Public Act of 2016, §6w (Michigan Compiled Laws §460.6w).

## **C. Potential Policy Options Described in the ICC White Paper**

### **1. Continue to Rely on Existing Competitive Forces and Market Structures**

Dynegy believes that a do-nothing strategy is not viable. The present market structures for MISO Zone 4 are not producing prices that will enable existing generation resources to remain in operation. The end result for consumers will be much higher prices, either through scarcity pricing for capacity in Zone 4 with capacity prices going to CONE (as noted at p. 17 of the ICC White Paper, currently set at \$94,690 per MW-year or approximately \$260 per MW-Day) and/or MISO forced to enter into SSR contracts with owners of retiring generators at prices such as described earlier in these Comments. Further, Dynegy's at-risk Downstate plants are typically the largest or one of the largest employers and taxpayers in their respective communities, so additional retirements of these plants will result in direct and indirect job losses, reduced economic activity, and reduced tax bases in these Illinois communities.

That noted, it would be reasonable for the ICC to be given (additional) legislative authority that would enable it to request and obtain (on a confidential basis where appropriate) load and pricing data from LSEs and capacity suppliers serving Zone 4, in order to provide the Commission with additional information and insights to monitor the resource adequacy and capacity pricing situation in Zone 4 and use it to formulate actions that are within its authority or to formulate request for additional authority. However, giving the ICC additional authority to collect information would not, by itself, be sufficient.

### **2. Impose Additional Capacity Requirements on LSEs**

#### **a. IPA Forward Capacity Hedging for Basic Service Load**

The ICC White Paper identifies several potential affirmative policy options for imposing additional capacity requirements on LSEs serving customers in Zone 4. The first option identified is to require the Illinois Power Agency ("IPA") to engage in additional (longer-term) forward hedging in the procurement events to secure capacity for Ameren Illinois to serve the load of the Ameren Illinois basic service customers (also referred to as default service or eligible retail customers). Since the ICC has authority under the Public Utilities Act ("PUA") to approve the IPA's proposed procurement plans and to order modifications to the IPA's submitted procurement plans, the ICC could, under its existing statutory authority, direct the IPA to engage in additional forward hedging in its capacity procurements for the Ameren Illinois basic service load.

As a general matter, Dynegy believes that procuring capacity farther in advance of the applicable delivery year and through longer-term contracts (more than one year) will result in capacity being supplied by generators with longer-term commitments to serving Illinois, and will produce prices that are more representative of long-term generation costs. As the ICC White Paper notes (pp. 18-19), this will also provide greater assurances that necessary capacity resources will be available, and will provide better price signals for both customers and suppliers and better information for capacity suppliers on the longer-term revenue streams that can be anticipated.

As the ICC White Paper correctly points out, however (p. 19), the IPA's and ICC's current authority only encompasses the procurement of capacity (and energy) for the Ameren Illinois basic service load. The ICC White Paper notes that for DY 2018-2019, the Ameren Illinois eligible retail customer load is forecasted to be 36% of the overall load in the Ameren Illinois service area.

Therefore, this approach, while it is capable of being implemented by the ICC and IPA without additional statutory authority, is not a complete solution to the capacity market and resource adequacy issues in MISO Zone 4.

**b. FRAPs for Basic Service and ARES Load**

**i. ARES FRAPs and Reports**

Another potential policy option identified in the ICC White Paper is to require Alternative Retail Electric Suppliers (“ARES”) serving customers in Zone 4 to submit Fixed Resource Adequacy Plans (“FRAPs”) to MISO in accordance with the MISO Tariff (and to submit advance reports of their FRAPs to the ICC). Under the MISO Tariff, a FRAP is one method a LSE can use to demonstrate to MISO that the LSE has secured sufficient capacity resources to meet its capacity obligations, including required reserve margin, for its load. Although the ICC currently has authority to grant, deny, or revoke certificates of service authority to ARES, and to regulate certain activities of ARES (or monitor their compliance with statutory requirements), the ICC White Paper is probably correct that the ICC does not currently have statutory authority to require ARES to develop and submit FRAPs. Statutory amendments would be required to give the ICC authority to require ARES, as a condition of certification, to develop and submit FRAPs to MISO each year. The legislation could also prescribe specific requirements for the FRAPs, *e.g.*, with respect to mix of resources, lead-time and duration of contracts, and other attributes. Alternatively, the legislation could give the ICC authority to prescribe such requirements for the ARES FRAPs.

This potential option is distinguished from the option described immediately below in that under this option, each ARES would develop and submit its own FRAP, subject to whatever criteria, if any, were imposed in the statutory amendments or by the ICC pursuant to authority. Under the next potential option, discussed immediately below, all capacity to serve retail load of either Ameren Illinois or ARES in Zone 4 would be obtained through IPA-run procurement events.

**ii. IPA FRAP Procurement**

Under this potential policy option, described in the ICC White Paper, the IPA, with oversight by the ICC, would be given authority to administer procurements events to procure the capacity needed by both Ameren Illinois and ARES serving customers in MISO Zone 4 to meet resource adequacy needs. The legislation authorizing the IPA and the ICC could specify criteria or requirements at varying levels of detail, ranging from prescriptive requirements in the legislation to broad delegation to the IPA and ICC to determine the attributes of the capacity to be procured. The results of the procurements would be embodied in a FRAP(s) that would be submitted individually or in the aggregate to MISO in accordance with the MISO Tariff.

Proposed Senate Bill 2250 and House Bill 4141 (the “Bills”) fall under this option. Section II of these Comments provides a summary of the proposed legislation. Dynegy believes that, overall, the IPA FRAP Procurement option is the best option of the potential policy options identified in the ICC White Paper, for a number of reasons. It would result in the entire capacity requirement for the LSEs serving retail load in the Ameren Illinois service area being procured through the same process, rather than in piecemeal fashion, thereby establishing a deeper market. The procurement of capacity could be designed to occur through a competitive bidding process. The General Assembly could establish high-level parameters for the procurement process and the attributes of the capacity contracts to be procured, but leave broad authority to the IPA, with oversight by the ICC, to develop and execute capacity procurement plans. The requirements



specified in the legislation could address specific issues in the current MISO PRA capacity procurement process, including the short-term nature of the process. The procurement plans and events would, of course, need to be designed and implemented so as to procure capacity in amounts and with attributes that are sufficient to satisfy the resource adequacy requirements of the MISO Tariff.

Additionally, the procedures for this option can be designed to largely conform to the procurement plan development, approval and execution processes currently in the IPA Act and PUA for procurement of capacity and energy resources for electric utilities' basic service load and for procurement of renewable energy credits to meet the Renewable Portfolio Standard. Further, the process can be designed (as is done in the Bills) to preserve each ARES' ability to choose how it wishes to structure its retail product offerings and prices to recover capacity costs along with other costs.

### **3. Create a Resource Adequacy Portfolio Standard**

Another potential policy option identified by the ICC White Paper is the development of a "Resource Adequacy Portfolio Standard," perhaps modeled, at least in concept, on the Zero Emissions Standard established by the FEJA. This option would also require legislation. As described in the ICC White Paper, this option could be implemented by developing a measurable attribute of generating capacity that capacity suppliers could provide, and requiring LSEs (Ameren Illinois, or both Ameren Illinois and ARES) to purchase the attribute in specified amounts. The sale of the capacity attributes would provide additional revenues to the capacity suppliers serving Zone 4. Comparable to the Zero Emission Credit ("ZEC") program established by the FEJA, the costs incurred by the applicable LSE(s) could be recovered through a "wires charge" to all delivery services customers in Zone 4, or could be recovered individually by each LSE through its charges to its customers, as the LSE deemed commercially appropriate.

Although this approach is potentially workable, there would be many details to be worked out. Dynegy believes that the full IPA FRAP option, described in the immediately preceding subsection, is a superior option. The full IPA FRAP approach can be more readily modeled and developed based on the existing procurement processes conducted by the IPA under ICC oversight, using competitive bidding procurement processes similar to those already used to procure energy for the Ameren Illinois basic service load and to procure renewable energy resources.

### **4. Reconfigure RTO Participation**

A final potential policy option identified in the ICC White Paper is to place all of Illinois under a single Regional Transmission Organization ("RTO"). In essence, this option would require either that Commonwealth Edison be moved from PJM into MISO, or that Ameren Illinois or MidAmerican be moved from MISO into PJM. As the ICC White Paper points out, current law essentially allows each Illinois electric utility to choose its RTO. Although the ICC White Paper does not recommend which RTO should be given responsibility for the entire State, the White Paper notes that PJM, unlike MISO, relies almost solely on market mechanisms to ensure there is sufficient capacity to meet customer demand. Dynegy observes that in recent years, the PJM capacity market processes have generally produced higher (and more stable, *i.e.*, less year-to-year fluctuation) capacity prices than have the MISO processes. Some capacity suppliers with resources not physically located in PJM have "pseudo-tied" their resources into PJM, presumably to be able to participate in the PJM capacity market processes that are viewed as being more attractive.

Legislation has previously been introduced in the General Assembly that would, in effect, require that Ameren Illinois move to PJM. This option may have additional advantages for the State beyond addressing the specific Zone 4 resource adequacy and capacity market concerns that are the subject of this workshop process. However, Dynegy notes, as does the ICC White Paper, that there could be considerable costs, including exit fees, associated with moving an Illinois electric utility into a different RTO. Dynegy believes that the full IPA FRAP approach is a more readily-executable option.

## **II. SUMMARY OF SENATE BILL 2250/HOUSE BILL 4141**

This section provides a summary of the capacity procurement provisions for MISO Zone 4 proposed in Senate Bill 2250 and identical House Bill 4141. However, the following caveat must be noted: The Bills, as written, provide for the capacity procurement processes they create and implement to begin in late 2017 or early 2018, with the initial capacity procurement event to be held in February 2018 to procure capacity for DY 2018-2019 (and subsequent periods). The schedule established in the Bills for developing and approving the annual capacity procurement plans and conducting the annual capacity procurement events is tied to the MISO deadline in early March of each year for submitting FRAPs. However, because the Bills were not acted on during the 2017 Veto Session, the earliest they could be passed and go into effect would be during the Spring 2018 legislative session. As a result, the first period for which capacity could be procured using the processes established in the Bills would be DY 2019-2020.

### **A. IPA Capacity Procurement Plans and Capacity Procurement Events**

The IPA will develop capacity procurement plans for submission to and approval by the ICC, and conduct capacity procurement events in accordance with the ICC-approved plans, to procure capacity needed to serve the load of all Ameren Illinois delivery services customers in MISO Zone 4. (As noted above, although the Bills provide for the first capacity procurement event to be in 2018 to procure capacity for DY 2018-2019, the initial year will now need to be DY 2019-2020). The capacity procurement events will be conducted to procure capacity on behalf of all LSEs (Ameren Illinois and ARES) serving retail customers in Zone 4.

The capacity to be procured for each year is the portion of the PRMR determined by MISO for Zone 4 that is attributable to the load of the Ameren Illinois delivery services customers in Zone 4 – this includes the load of Ameren Illinois’ basic service customers (eligible retail customers) and the load of ARES’ customers. However, it does not include the load of customers of municipal utilities and cooperatives.

The IPA is to develop capacity procurement plans to provide for the procurement of the required amounts of capacity through a mix of contracts of varying lengths as proposed by the IPA and approved by the ICC in an order issued at the conclusion of a docketed proceeding. The overall objective of the procurements is to ensure long-term resource adequacy at the lowest cost over time, taking into account the benefits of price stability and the need to ensure the reliability, adequacy and resilience of the generation and delivery system in Zone 4. The capacity procurement events are to be conducted in January or February of each year, in accordance with the ICC-approved plan, so that the results can be used by the LSEs for their FRAP submissions to MISO by the annual FRAP deadline, which occurs in early March.

The capacity procurement events will be administered by the IPA’s procurement administrator (“PA”), with the winning bidders selected by the PA, subject to final approval by

the ICC. This aspect of the process is intended to be the same as the procedure currently specified in the IPA Act and the Public Utilities Act (“PUA”) for capacity and energy procurements for basic service customers and for renewable resources procurements.

ARES will be required, as a condition of continued certification, to use only capacity procured through the IPA capacity procurement events to meet their capacity obligations with respect to the loads of their retail customers in Zone 4. Ameren Illinois and ARES will be required to use the FRAP provisions of the MISO Tariff to meet their PRMR obligations for their retail loads in Zone 4, using the capacity procured in the IPA capacity procurement events.

For each capacity procurement event beginning with the procurement event to be conducted in early 2019, the IPA must post a draft capacity procurement plan for comment by July 15, providing 30 days for comments.<sup>15</sup> The IPA must then file its proposed procurement plan (with such revisions as have been made based on the comments or other information) with the ICC by 15 days after the end of the comment period. The ICC will then initiate a docketed proceeding for review of the proposed plan. The ICC must issue its order approving the IPA’s proposed plan, or approving it with modifications, by December 1.

The procurement objective of the capacity procurement event to be conducted in each year is to procure the following:

- Capacity sufficient, together with capacity procured in any previous capacity procurement events, to meet 90% of the projected PRMR attributable to the load of Ameren Illinois’ delivery services customers in Zone 4 in the DY starting at the third June 1 following (*e.g.*, the capacity procurement event conducted in January or February 2019 will procure capacity for DY 2021-2022 sufficient to have 90% of the capacity requirement for DY 2021-2022 contracted.)
- Capacity sufficient, together with capacity procured in previous capacity procurement events, to meet 100% of the projected PRMR attributable to the load of Ameren’s delivery services customers in Zone 4 in the DY starting with June 1 of that year (*e.g.*, the capacity procurement event held in January or February will procure capacity for DY 2019-2020 sufficient to have 100% of the capacity requirement for DY 2019-2020 contracted).<sup>16</sup>

The capacity procured in the procurement events for each DY must include capacity purchased from capacity resources located within MISO Zone 4 at least equal to the portion of the LCR, established by MISO for Zone 4, that is attributable to the load of the Ameren Illinois delivery services customers. Additionally, in each capacity procurement plan, the IPA is to consider whether additional factors, other than price and the MISO LCR, to support reliability in Zone 4 should be taken into account in the selection of capacity resources, based on such factors as transmission security, voltage support, dynamic stability, frequency response, fuel security and

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<sup>15</sup> For the reasons stated at the start of this Section II, a description of the procurement plan development process and requirements for the capacity procurement to be conducted in early 2018 to procure capacity for DY 2018-2019, as provided for in the Bills, is omitted here.

<sup>16</sup> Because the initial capacity procurement event will be held in early 2019, that event will need to procure 100% of the capacity needed for DY 2019-2020 and 90% of the capacity needed for DY 2020-2021. The capacity procurement event held in early 2020 would then procure any remaining capacity needed for DY 2020-2021.

on-site fuel supply, and import transfer capability. The IPA may, but is not required to, procure specific amounts of capacity from resources located within Zone 4 (in addition to the LCR) to support reliability within Zone 4. The IPA's proposals (if any) will be subject to comments of parties on the IPA's draft plan and in the ICC docketed proceeding and to ICC approval in its order on the capacity procurement plan.

In the capacity procurement events, any capacity resources will be eligible to participate as bidders so long as (1) the capacity resource satisfies the requirements of the MISO Tariff to be designated a Zonal Resource Credit or other Planning Resource in a LSE's FRAP; and (2) the capacity supplier agrees that if selected, it will enter into standard form contracts promulgated by the IPA.<sup>17</sup> As an exception, however, capacity resources of a municipal electric utility, electric cooperative, municipal electric power agency, or other group, association, or consortium of municipal utilities or electric cooperatives may participate as bidders only to the extent that the entity's capacity resource exceeds the capacity required to serve the obligation-to-serve load of the municipal electric utility, electric cooperative, municipal electric power agency, or group, association, or consortium of municipal utilities or electric cooperatives.

An LSE that, as of the effective date of the legislation, has contracted capacity to serve the LSE's load in MISO Zone 4 in DY 2019-2020 and/or DY 2020-2021, may bid that capacity into the initial, 2019 capacity procurement event using one of the following options:

- The LSE may offer the capacity into the capacity procurement event at an offer price specified by the LSE; based on the offer price, the capacity offered by the LSE will or will not be selected by the PA.
- The LSE may designate all or part of the capacity to be selected by the PA at the weighted average price of all other capacity selected in the capacity procurement event. Under this option, the LSE's capacity is guaranteed to be selected.

LSEs with contracted capacity are not required to use either option and may dispose of the contracted capacity through other means as they deem appropriate.

For each capacity procurement event, the PA, in consultation with the IPA Staff, ICC Staff, and the procurement monitor ("PM") is to establish confidential market-based benchmarks to use in evaluating the final prices in the contracts for the capacity that will be procured. (The establishment and use of price benchmarks is provided for in the current IPA Act and PUA provisions pertaining to procurements for basic service load and renewable resources.) In the capacity procurement event, the PA will select capacity resources (in each category, if applicable) for each DY for which capacity is being procured based on the lowest price until the amount of capacity to be procured in the event is reached. Each selected capacity supplier will be paid its offer price (that is, there is not a single "market clearing price" of the last bidder selected that is paid to all selected suppliers). However, the PA may negotiate with bidders whose bids were at or below the price benchmarks to reduce their prices. The PA's determination as to the selection of the winning capacity resources in a capacity procurement event will be subject to approval of the ICC (as is the case currently under the PUA for procurements of capacity and energy to serve the electric utilities' basic service loads and procurements of renewable energy resources).

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<sup>17</sup> Capacity awarded in Ameren Illinois' Peak Time Rewards program will be included in the capacity procured for each DY (with Ameren Illinois deemed the supplier of this capacity for contracting purposes), at a price equal to the weighted average price of the other capacity resources selected.

If insufficient capacity is procured in a capacity procurement event, the IPA may conduct an additional procurement event, if time permits, or may direct the LSEs to obtain any remaining capacity needed through the MISO auction process. If it develops that excess capacity has been procured for the immediately upcoming DY, the IPA may direct that there be pro rata reductions in all capacity contracts for that DY.

## **B. Contracting, Settlement and Administration Provisions**

Each capacity supplier selected in a capacity procurement event and each Zone 4 LSE must enter into a standard form contract, developed by the PA in conjunction with the IPA and ICC Staff, that will provide for (among other things) the following:

- Each LSE is purchasing from each capacity supplier a portion of the supplier's contracted capacity equal to the LSE's load ratio share of the total PRMR attributable to the Ameren Illinois delivery services customers on March 1 immediately preceding the first DY for which the contract is in effect.
- The capacity purchased by the LSE from each capacity supplier will be adjusted, each day, based on changes in each LSE's load ratio share of the total PRMR attributable to the Ameren Illinois delivery services customers on that day. The daily load ratio shares of each LSE will be determined based on daily reports issued by Ameren Illinois to the capacity data administrator ("CDA") showing the load of the delivery services customers served by each LSE on each day; the CDA will issue daily reports to the LSEs and capacity suppliers showing what portion of the capacity supplied by each capacity supplier was the contractual responsibility of each LSE on that day.<sup>18</sup>
- The contracts will contain standard provisions relating to frequency of billing periods, payment remittance periods, credit, collateral, performance, and dispute resolution, between the capacity supplier and the LSE; however, a capacity supplier and an LSE can agree to modify these terms in their contract.

Ameren will recover its costs for capacity through its power supply tariff or other cost recovery mechanism. ARES will recover their costs for the capacity through their contracts and other arrangements with their retail customers, as each ARES deems appropriate and negotiates with its customers. This will enable ARES to offer and enter into pricing and service arrangements with customers as they deem appropriate based on the competitive retail market.

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<sup>18</sup> The Bills provide that the IPA will ask MISO to act as the CDA (since it already processes much of the relevant data); if MISO declines, the IPA will contract with a third party to act as the CDA.

**ATTACHMENT A**

**Testimony of Dean Ellis, Executive Vice President, Regulatory Affairs, Dynegy**

**Before the**

**Joint Subject Matter Hearing of the House Energy and Senate Energy and Public Utilities**

**Committees of the Illinois General Assembly on House Bill 4141 and Senate Bill 2250**

**November 7, 2017**

**Joint Subject Matter Hearing of the House Energy and Senate Energy and Public Utilities  
Committees of the Illinois General Assembly on HB 4141 and SB 2250**

**November 7, 2017**

**Testimony of Dean Ellis, Executive Vice President, Regulatory Affairs, Dynegy**

Good morning. Chairwoman Hunter, Chapa La Via, Spokesperson Rezin, Davidsmeyer, members of the joint committee, and guests. Thank you all for being here today. My name is Dean Ellis, and I am Executive Vice President for Regulatory and Government Affairs for Dynegy. I am pleased to have the opportunity to appear before the General Assembly again to discuss Dynegy's concerns regarding resource adequacy and the electric capacity markets in Downstate Illinois and our proposals to improve the electric capacity markets and ensure resource adequacy in Downstate Illinois for the future. I would also like to thank our sponsors, Senators Clayborne, Rezin, and Representatives Chapa LaVia, Bourne, and Sims.

Dynegy is the largest owner and operator of electric generating plants in Downstate Illinois, meaning in general, south of Interstate 80, and more specifically, the service area of Ameren Illinois. Dynegy owns a total of eleven (11) generating plants in Illinois. Eight (8) of those generating plants are located in communities across Downstate Illinois within the MISO Zone 4 region, with the remaining three (3) units located within the PJM region serving northern Illinois. These numbers do not include plants that Dynegy has recently shut down in 3 communities Downstate. Dynegy is also the largest retail electric supplier in Downstate Illinois, with customers in over 450 communities and some 80 Illinois counties. Dynegy currently serves about 830,000 retail customers in Illinois. Dynegy employs a total of 1,300 people in Illinois, has an annual Illinois payroll of about \$135 million, and pays about \$39 million per year in State taxes and \$22 million in local property taxes. Dynegy's annual economic impact to the State of Illinois is over \$2 Billion in direct and indirect benefits. Also, \$2 billion has been invested over the past 10 years in its Illinois plants for emissions controls and environmental upgrades.

Before I launch into details, let me summarize the major points I want to impress on you:

**First**, the Downstate Illinois electric capacity market, run by the Midwest Independent System Operator, or MISO, is not working for customers and suppliers alike. The existing MISO capacity market has produced low and unstable prices for capacity in Downstate Illinois. The revenues generators derive from these low capacity prices are not enough to support existing generation plants Downstate or to incent the construction of new generation capacity. In response to this poor market design, Dynegy has already shut down plants in 3 communities Downstate and has another 3,000 Megawatts of capacity Downstate at risk of shut down.

**Second**, although MISO currently projects modest capacity surpluses in the region over the next several years, the retirement of just a portion of Dynegy's at-risk plants would result in a capacity shortage in Downstate Illinois, which in turn would result in substantial price increases to consumers.

**Third**, MISO recognizes that its capacity market mechanism, while well-suited for most of the other MISO states, is not well-suited to Illinois' competitive electricity markets. MISO has asked the Governor and the Legislative Leaders to work to develop an Illinois-

specific capacity market solution that is suited to Illinois' specific conditions, and that also fits within the existing FERC-accepted MISO tariff.

**Fourth**, in response to MISO's request and the urgings of members of the General Assembly from last Fall that work continue on a Downstate solution, Dynegy has worked with Ameren to develop what we believe to be a workable Illinois capacity market construct. Our proposal is embodied in Senate Bill 2250 and identical House Bill 4141. Our proposal would use a competitive process, be administered by the Illinois Power Agency pursuant to plans approved by the Commerce Commission, would allow all capacity resources to participate without establishing quotas or set-asides for particular types of generation, and would meet the resource adequacy requirements established by MISO. The proposal does not require that additional charges be imposed on ratepayers to provide subsidies to specific, favored suppliers. Rather, the electricity prices consumers pay will continue to be the product of competitive market processes. Finally, adoption of this Illinois-tailored solution will help to preserve jobs, economic activity, tax base, and local communities in Downstate Illinois.

I say that I am pleased to appear again because I last testified last Fall concerning the bill known as the Future Energy Jobs Act, or FEJA. At that time, like today, my focus was on our concerns about resource adequacy and the electric capacity markets in Downstate Illinois. Until shortly before its passage, the FEJA included provisions, which were developed by Dynegy and Exelon, to address the capacity market and resource adequacy issues in Downstate Illinois. Unfortunately, those provisions were removed from the FEJA shortly before its passage. However, many members expressed concern that although the FEJA provided ratepayer subsidies to keep Exelon's troubled nuclear plants in operation, it left the Downstate capacity market issues unresolved. Many members committed to continue to work towards a solution for the Downstate capacity market and resource adequacy issues.

Subsequent to passage of FEJA last Fall, and in fact late in the Spring legislative session this year, MISO – which is the grid operator for a 15-state region that includes Downstate Illinois – wrote to the Governor and the four legislative leaders urging them to work to develop an Illinois-specific solution to the Downstate resource adequacy issues. MISO's request was driven, in part, by the fact that in 13 of the 15 states in MISO's footprint, electricity is provided by vertically-integrated utilities that serve customers in defined service areas and charge them rates that are set by state utility commissions at levels that recover the utilities' costs, including the costs of their generation. By "vertically-integrated," I mean utilities that, unlike Ameren and ComEd, own the generating plants that provide power to consumers. Only in Downstate Illinois, alone among the 15 MISO states, is there fully competitive wholesale and retail electricity markets in which consumers can choose among retail providers to obtain their electric supply, and the retail providers in turn obtain their electric supply from generators operating in a competitive wholesale market.

A Downstate Illinois-specific solution can be coupled and work effectively with MISO's existing procedures for maintaining resource adequacy throughout MISO's region. In Michigan, the one other State in MISO that has at least a partially competitive electricity market, the State legislature has recently enacted Michigan-specific provisions designed to ensure long-term electric resource adequacy for Michigan while functioning in conjunction with the MISO processes.

In response to MISO's request and the urgings of legislators that efforts continue to find a solution for the Downstate capacity market issues, Dynegy has continued to work with Ameren Illinois to develop an acceptable capacity market mechanism specific to Downstate Illinois. In doing this,



we have tried to eliminate concerns that stakeholders had with our proposal in the legislation last Fall. I am happy to report that these efforts have been fruitful. The product is Senate Bill 2250, sponsored by Senators Clayborne and Rezin, and identical House Bill 4141, sponsored by Representatives Chapa LaVia, Bourne and Sims.

### **The Problem**

Competitive electricity prices and adequate supplies of competitive electricity have been a positive for Illinois in the continuing effort to attract new business, industry, investment and jobs to Illinois and retain existing businesses and jobs. However, this competitive edge is threatened in Downstate Illinois. The capacity market mechanisms operated by MISO for its 15-state region are producing capacity prices in the Downstate region – referred to as MISO Load Zone 4 – that have been volatile and, frankly, too low to support existing generators or to incentivize new investment in generation in the region. Indeed, this was a principal reason why the Clinton nuclear plant needed the Illinois-specific revenue support provided by the ZEC program in order to remain in operation. In the past three years, the annual MISO capacity market auctions for Downstate Illinois have produced prices ranging from \$150 per MW-Day, to \$72, to \$1.50 per MW-Day. A MW-Day means one megawatt of generating capacity provided for each day of a specified time period such as a year. Clearly, no company would commit to long-term investments in the face of such volatile market pricing.

We can contrast these prices from the MISO capacity auctions for Downstate Illinois to the prices in the capacity auctions conducted by the PJM Regional Transmission Operator for the ComEd service area in Northern Illinois. As you know, the transmission grids in Illinois are operated by two separate grid operators – PJM for Northern Illinois, essentially the ComEd service area; and MISO for Downstate Illinois, essentially the Ameren Illinois service area. The most recent capacity auctions for Northern Illinois conducted by PJM have produced prices of \$215, \$202, and \$153 per MW-Day. Frankly, if Downstate Illinois had a capacity market that functioned as well and produced similar prices to those in the PJM capacity market in Northern Illinois, there would not be a problem with resource adequacy Downstate.

In the face of the erratic and low pricing produced in the MISO capacity auctions for Downstate Illinois, Dynegy has found it necessary to retire or shut down generating units in several communities Downstate. We have permanently retired our entire Wood River plant in Madison County and one unit of two units at our Newton plant in Jasper County, and we have taken one of three units at our Baldwin plant in Randolph County out of service with decreasing likelihood that it will return to operation. These plants represented about 20% of the generating capacity in Downstate Illinois. Dynegy still has operating plants in 8 communities Downstate, which collectively represent about half the generating capacity in MISO Zone 4. If the erratic and low capacity prices in MISO Zone 4 continue, Dynegy will undoubtedly retire more of its Downstate plants. It is simply not economic for us to continue all these plants in operation based on the revenues that the current MISO market mechanisms are producing. At some plants, these prices are not even sufficient to recover fuel and operating costs, let alone any return. Further, the unstable prices do not warrant making any investments to improve the operating efficiency of our plants. Dynegy's finite investment dollars are more effectively spent on our facilities in other states.

In the current environment, economics driven by the current MISO process could dictate that up to one half of Dynegy's remaining generating capacity in Downstate Illinois should be retired by 2021, with some of those retirements beginning next year. These retirements would eliminate

about 550 union jobs in Illinois, as well as, we estimate, about 4,000 indirect jobs. It would also eliminate the largest single property taxpayer in several school districts, municipalities and counties. In addition, our 1,000 Megawatt Joppa plant in Massac County is not physically located in MISO Zone 4 and its capacity and energy can be sold into other regions where pricing is better, rather than used to serve load in Zone 4.

Our proposed merger with Vistra does not change any of this because I would expect that Vistra, like Dynegy, will evaluate each plant on a standalone basis. Indeed, Vistra announced in October that it is retiring three coal-fueled plants in Texas totaling 4,200 Megawatts of capacity.

What would retirements of Dynegy capacity mean for resource adequacy Downstate? In its annual projections released in June 2016, MISO projected a capacity deficit of 1,600 MW for Zone 4 in 2018. Then in June 2017, MISO projected a 700 MW capacity surplus for Zone 4 in 2018 and a 400 MW capacity surplus for 2022. Part of the difference in the two projections is that the 2016 projection assumed the Clinton plant would be retired, while the 2017 projection assumes, post-FEJA enactment that Clinton remains in operation. However, these projections, while the product of considerable effort by MISO, are based on assumptions as to load growth, new plants potentially coming on line, and existing plants remaining in service. MISO's most recent projections reflect the shut down of only Dynegy's 600 MW Baldwin Unit 3 and assume that Dynegy's other at-risk units will continue in operation and that the Joppa plant will continue to be used to serve load in Zone 4 rather than another region. By using several reasonable alternative assumptions to those used in MISO's report, including the retirement of just a portion of Dynegy's at-risk generation or diversion of the Joppa plant to serve another region, one could just as easily project capacity deficits of hundreds of megawatts for Zone 4 for as early as 2018 and 2019.

Under MISO's tariff that has been approved by the Federal Energy Regulatory Commission, if there is a capacity shortage situation, the price of capacity jumps to an administratively set price called Cost of New Entry, or CONE, which is currently \$260 per MW-Day. Ameren has estimated that if there were a capacity shortage in Downstate Illinois, the price increase impact could be \$23 per megawatt-hour, or 2.3 cents per kilowatt-hour. For a typical residential customer using about 840-1,000 kilowatt-hours per month, this is an increase of \$19-23 dollars per month.

What are the specific flaws in the existing MISO capacity market mechanism for Downstate Illinois? The MISO capacity market mechanism is actually well-suited to the needs of the 13 other MISO states that still have traditionally-regulated, vertically-integrated electric utilities. As a result, there is little interest among MISO to persuade its members and non-Illinois stakeholders to move to a different approach that works for Illinois. This is why MISO has urged the Governor and General Assembly to develop an Illinois-specific solution.

We have focused on three specific flaws in the current MISO capacity market mechanism, as it applies to Illinois.

**First**, the MISO capacity auctions only acquire capacity for the immediately upcoming delivery year – that is, for the one-year period that starts about 2 months after the capacity auction is concluded. This means that in MISO, capacity suppliers can bid their short term available excess capacity into the auction at low prices, with no commitment made to provide capacity to serve Downstate Illinois for a longer term. In contrast, the PJM capacity auction procures capacity three years in advance. The PJM mechanism requires generators to make a longer-term commitment to serving the region. In MISO, in comparison, utilities in the regulated states, who may have excess capacity available for

just the upcoming year, aren't required to commit to provide their capacity to serve Downstate Illinois in future years, when they may in fact need that capacity to serve their own service area customers.

**Second**, the MISO capacity auction is only designed as a mechanism for utilities in the 15-state MISO region to obtain the residual capacity they may need to serve their customers in the immediately upcoming year, beyond the generating capacity that they already own. In other words, the MISO process does not procure capacity for the entire needs of the market. As a result, it is not a very deep market and not a good tool for price determination.

**Third**, the MISO capacity market process selects the winning bidders based on the highest bid needed to secure the amount of capacity required; it then pays all the selected bidders the price that was bid by the last, highest-priced bidder selected. What this induces, in combination with the short-term focus of the MISO auction, is that generators with excess capacity available on a short-term basis can bid it in at a zero price or a very low price, knowing that they will probably be selected and then paid the higher price that was bid by the last bidder selected.

### **Proposed Legislative Solution**

What is our proposal to address these flaws? First, capacity needed for the customer load in Zone 4 that is subject to the ICC's jurisdiction would be procured in capacity procurement events conducted by the Illinois Power Agency. The IPA would develop annual capacity procurement plans, post them for public comment, then file them with the ICC. The ICC would conduct a proceeding to review the IPA's plan, and issue an order approving the plan or requiring revisions. This is the same procedure set out in Illinois law and employed for some 10 years now to procure both renewable energy and electric supply for those residential and small business customers who have stayed with ComEd or Ameren for their power supply.

Second, the IPA would be required to procure the capacity requirements for the entire Ameren Illinois service area load, that is, to meet the capacity requirements for the customers served by Ameren Illinois and those served by ARES. The total amount of capacity to be procured would be the amount of capacity needed to serve the load of these customers plus a reasonable reserve as determined by MISO. It would therefore be a deep market - we estimate that 8,500 to 9,000 MW of capacity would need to be procured in the IPA-run process for each year. However, to be clear, the process would *not* apply to the capacity required for the retail customers of municipal utilities such as Springfield and electric cooperatives such as Prairie Power. These public power entities would retain their traditional responsibility and prerogative to obtain the electricity supply needed to serve their consumers.

Third, after a short initial transition period, in each year the IPA would procure 90% of the capacity projected to be needed 3 years in the future to meet MISO's resource adequacy requirements, and the remaining 10% of the needed capacity would be procured shortly before the start of each year. The capacity would be procured through a mix of contracts of different lengths as proposed in the IPA's plan and approved by the ICC. The "last 10%" provision will give the IPA flexibility to purchase the precise amount of capacity required based on the most recent load forecasts.

Further, during the transition period, our plan provides ARES with options place capacity they may have already sold into the new procurement process.

In addition, the IPA would be required to establish market price benchmarks to use to evaluate the reasonableness of supplier bids. The IPA's selection of winning bidders would be approved by the ICC. These procedures are in the existing law and are used for the procurements of renewable resources and electric supply to serve the customers who remain with ComEd or Ameren.

Fourth, all capacity resources, including demand response, renewables and energy efficiency, could participate in the procurement events as bidders, so long as they met MISO's requirements to qualify as a capacity resource. Capacity resources located outside of Zone 4 could participate, so long as transmission enables them to deliver into Zone 4. However, some portion of the capacity to be procured, as specified in the IPA's plans and approved by the ICC, would have to be physically located within Zone 4, in order to meet MISO's requirements for in-Zone resources and other reliability considerations.

Fifth, capacity resources would be selected on a pay-as bid basis, rather than all bidders selected being paid the price bid by the last bidder selected. This will provide a range of prices, resulting in a weighted average price. It will also discourage lowball or zero price bidding, because if you bid zero, you get selected and are paid zero – not the higher, clearing price that someone else bids. Thus, the bid submitted by each supplier will have to realistically reflect that supplier's costs.

Sixth, without getting into detailed mechanics, the proposal includes a procedure to allocate the costs of the capacity procured in the IPA events among Ameren Illinois and the ARES, based on each load-serving entity's customer load. The procedure uses existing data collection and reports used to track customer switching between suppliers. MISO and Ameren Illinois, as well as Dynegy's retail team, believe it is a workable and efficient process. As a result, under our proposal there is no need for a "wires charge" imposed on all consumers to recover the capacity costs. Rather, ARES, just as they are able to do today, will be responsible for recovering the capacity costs attributable to its customer load through whatever pricing mechanism and pricing offers it wants to use in the competitive retail market.

That's our proposal in a nutshell. It uses a competitive process, requires all load-serving entities to participate with the exception of munis and co-ops, is administered by the IPA pursuant to plans approved by the ICC, allows all capacity resources to participate without establishing quotas or set-asides for particular types of generation, and meets the resource adequacy requirements established by MISO. It does not require that additional charges to be imposed on ratepayers to funnel subsidies to specific, favored suppliers. Rather, the electricity prices consumers pay will continue to be the product of competitive market processes. Finally, adoption of this Illinois-tailored solution will help to preserve jobs, economic activity, tax base, and local communities in Downstate Illinois.